# Eastern RTAC Trauma Registry Report

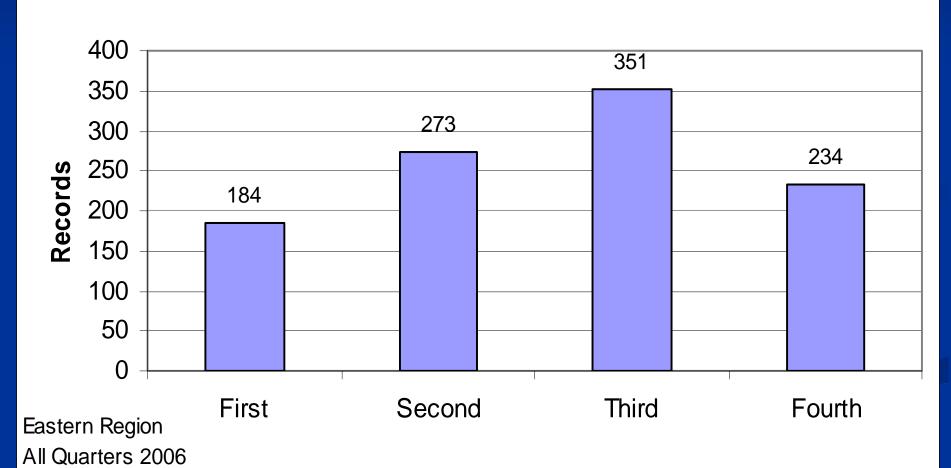
All Quarters, YTD 2006

January 1 – December 31

#### 2006 YTD Facility Records: 1042

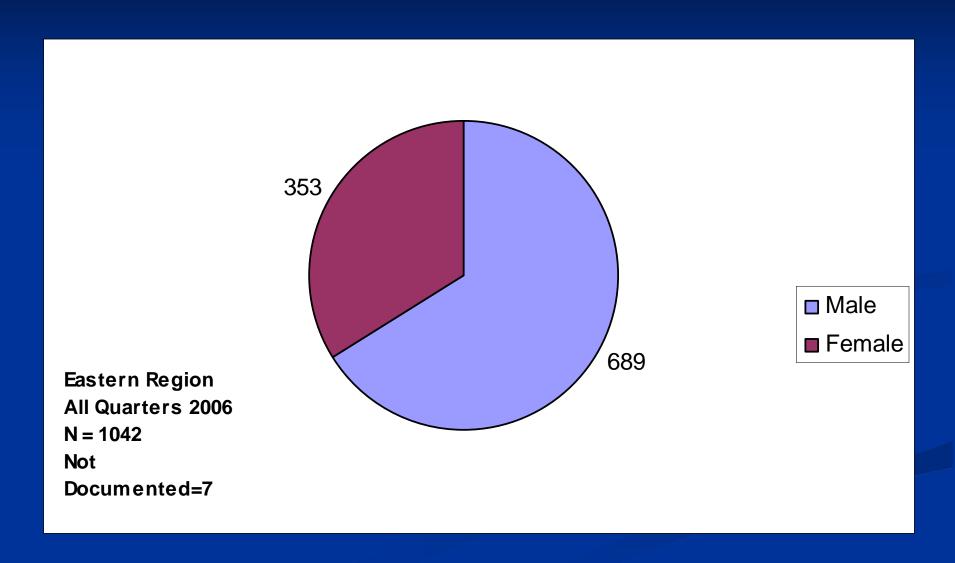
Livingston Memorial Hospital	34
Harlowton - Wheatland Memorial Hospital	10
Plentywood - Sheridan Memorial Hospital	6
Sidney Health Center	) 1
Miles City - Holy Rosary Health Center	1
Glasgow - Frances Mahon Deaconess Hospital	6
Big Timber - Sweet Grass Community Hospital	13
Bozeman Deaconess Hospital	111
Billings - Deaconess - Billings Clinic	413
Billings - Saint Vincent Hospital & Health Center	442
Lame Deer Clinic	1
Colstrip Medical Clinic	4

#### **Records by Quarter**

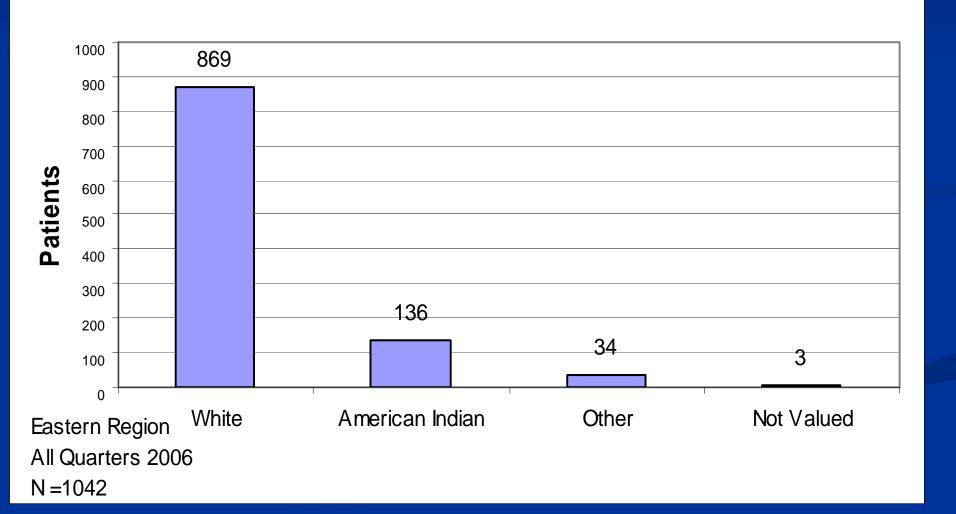


N = 1042

### Gender

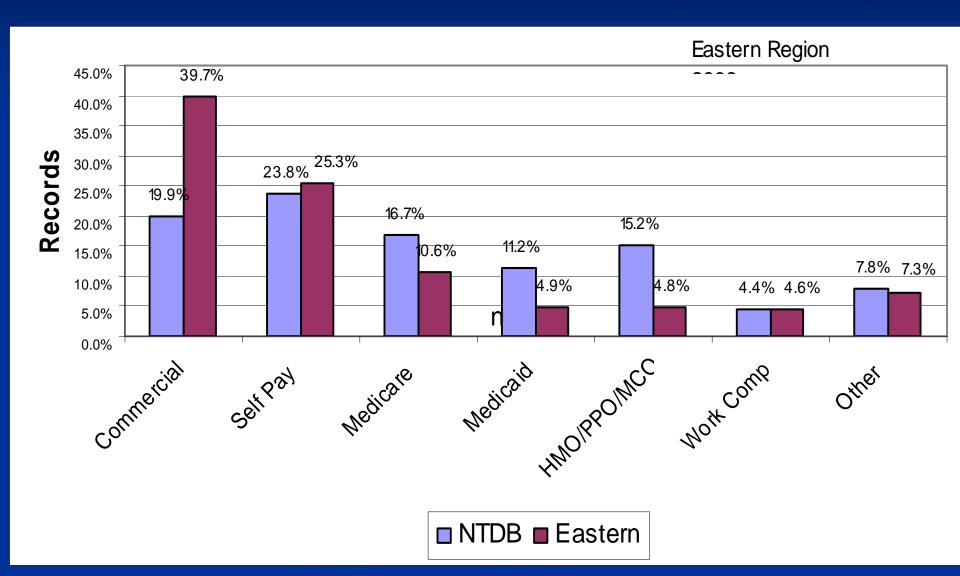


### Race



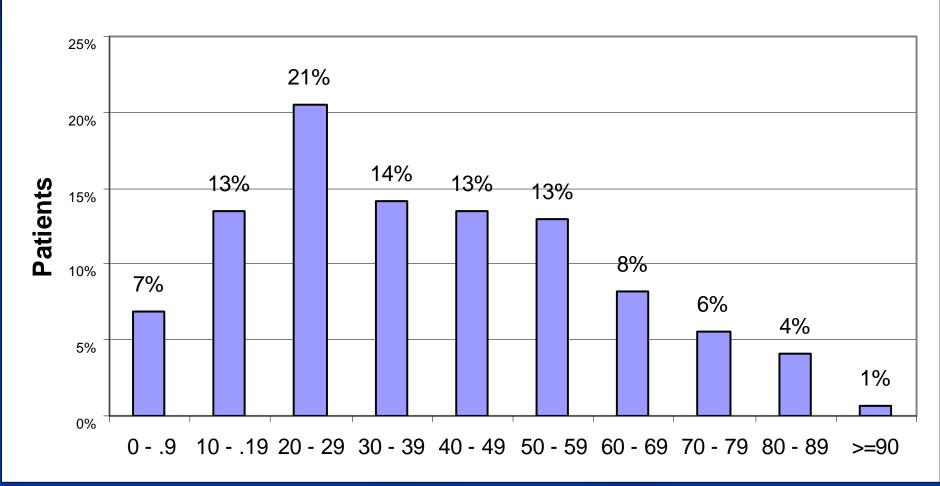
## **Primary Payor Sources**

Not valued = 2.8%



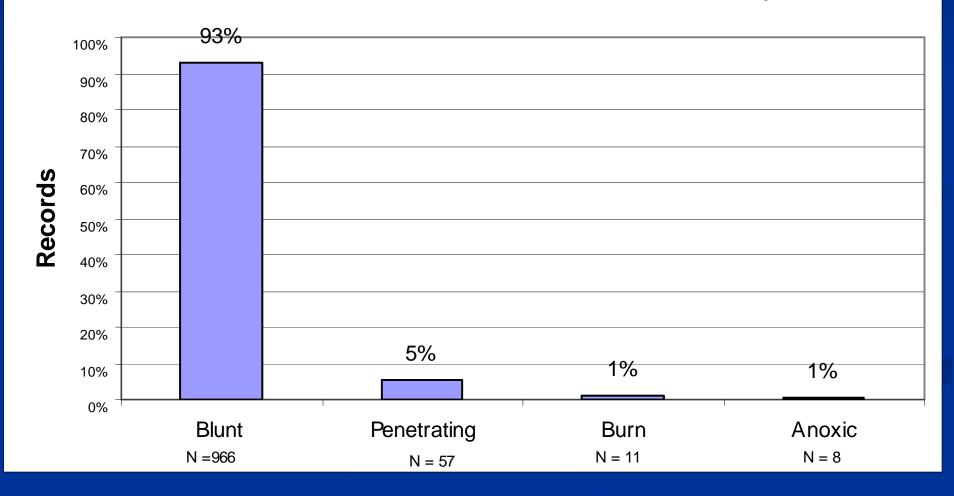


Eastern Region
All Quarters 2006
N = 1042



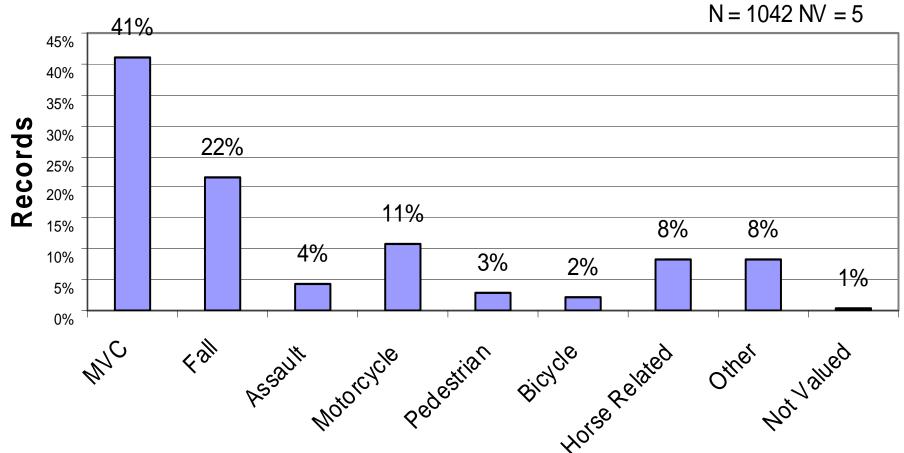


Eastern Region
All Quarters 2006
N = 1042



#### **Blunt Injury Cause**

Eastern Region
All Quarters
N = 1042 NV = F



## Penetrating Injury Cause

#### Total 48

#### <u>Knife (25)</u>

8 – self inflicted

17 – assault

#### Handgun (19)

9 – self inflicted

4 – assault

6 – accidental

#### <u>Other (11)</u>

2 – self inflicted

9 – accidental

#### Not Valued (986)

9 – self inflicted

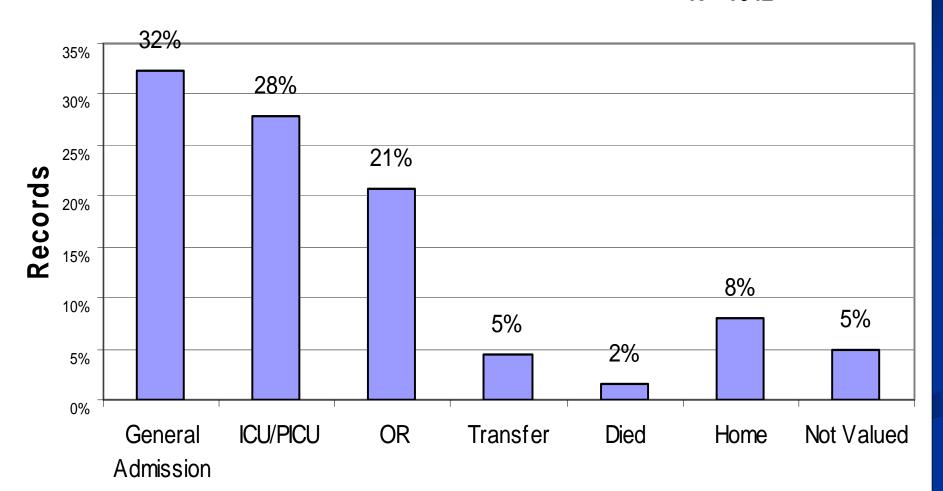
44 – assault

929 – accidental

4 – not valued

#### **ED Disposition**

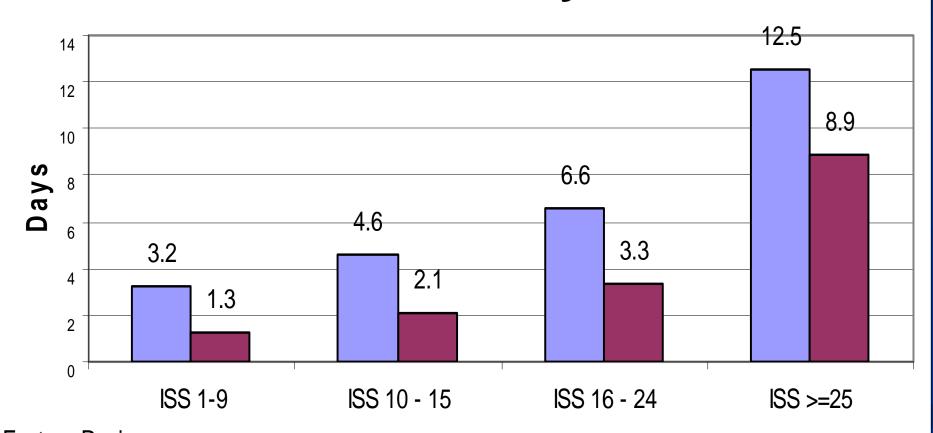
Eastern Region All Quarters 2006 N = 1042



## Location of Injury

Location	# Records	Percentage
Home	202	19.4%
Farm	50	4.8%
Industry	36	3.5%
Recreation	93	8.9%
Street	524	50.3%
Public Building	27	2.6%
Residential Institution	3	0.3%
Other	35	3.4%
Unspecified	72	6.9%
Total	1042	100%

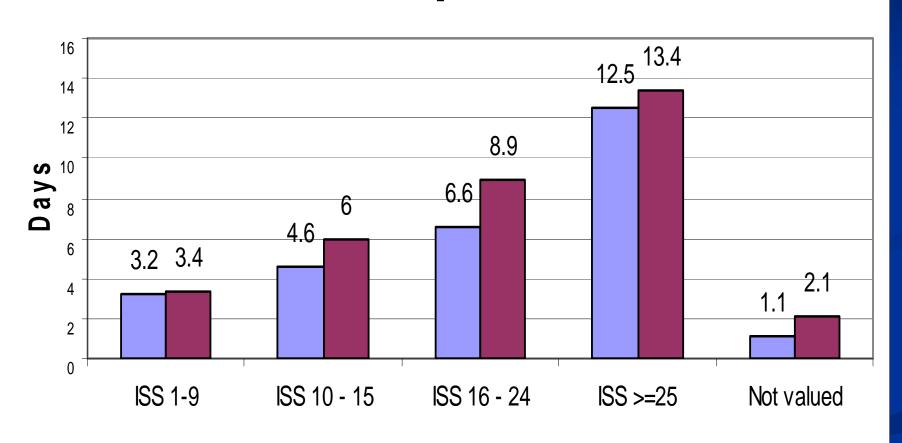
# AVG LOS by ISS



Eastern Region All Quarters 2006

■ Hospital ■ ICU

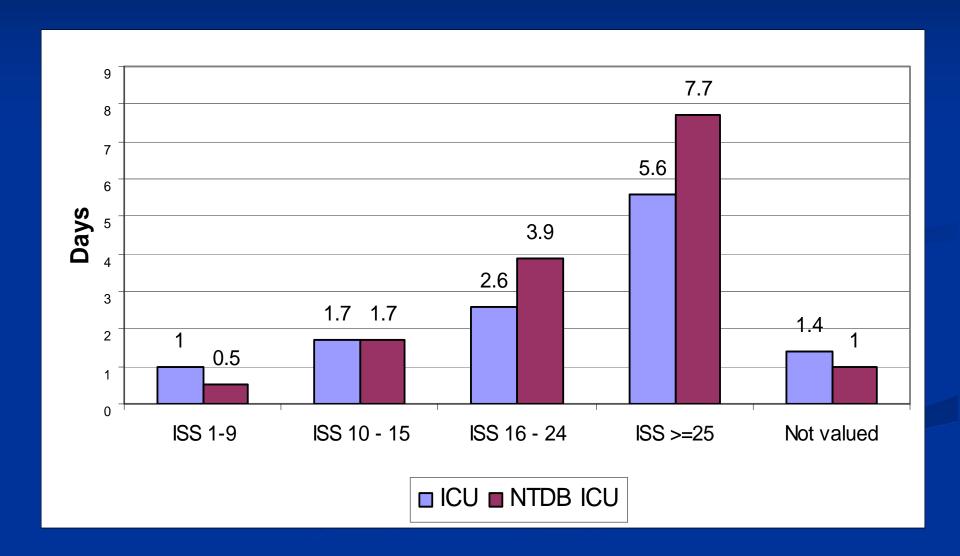
# **AVG Hospital LOS**



Eastern Region
All Quarters 2006

■ Hospital
■ NTDB Hospital

## Avg ICU LOS



## ISS $\geq$ 25 & Hosp LOS $\geq$ 15 days

Total = 39 pts

Those that had a Hospital LOS ≥15 days

23 – Billings Clinic, (avg. ISS 32)

total hosp days = 656 (avg. 17days/pt.)

16 – St. Vincent, (avg. ISS 31)

total hosp days = 487 (avg. 30days/pt.)

#### Patients Discharged Out of State

$$N = 41$$

- Brain/other = 13
- Spine/other = 10
- $\blacksquare$  Brain/Spine = 6
- $\Box$  Chest/other = 4
- Pelvis/other = 3
- Arr Ortho = 3
- Burn = 1
- $\Box$  Other/Misc = 1

Of the 41,

12 went directly to Acute Care from ED

6 were admitted first before transfer

To Rehab: 15

To NH: 7

- \* 11 of the 49 went to a Pediatric Facility
- \* 15 of the 49 went to a facility in their home state

# Patients Transferred into Eastern Region

N = 87

85 from 11 Wyoming locations

2 from Williston, ND

**Injuries:** 

Brain: 21

Spine: 17

Abd/Pelvis: 13

Brain/other: 10

Spine/other: 10

Chest/other: 8

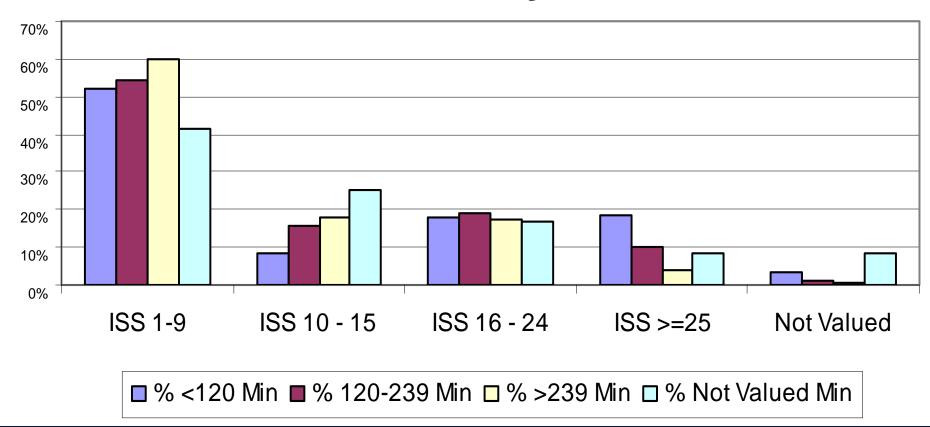
Orthopedic: 2

Facial: 2

# ED Home by ISS

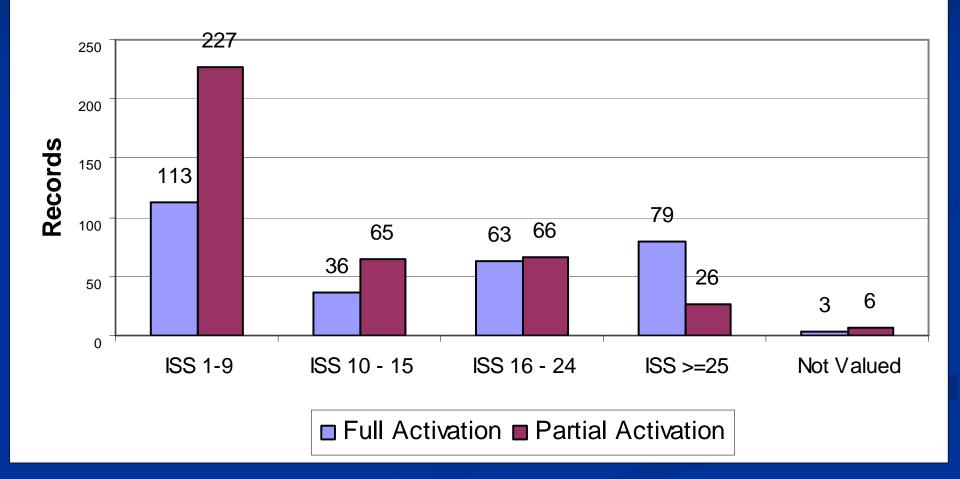
	# Records
1 - 9	76
10 - 15	3
16 - 24	0
<u>≥</u> 25	0
Not Valued	4
Total	83

## ED LOS by ISS



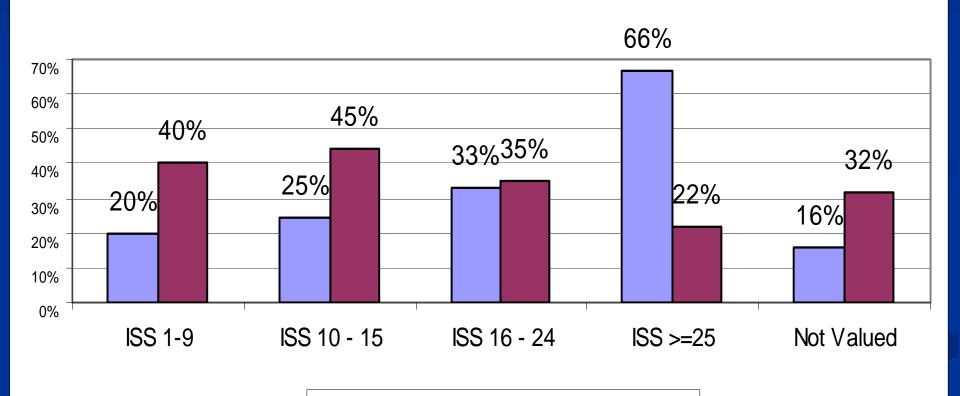
#### **Activations**

Eastern Region All Qtrs, 2006 N =1042



# **Activations (%)**

Eastern Region
All Quarters 2006
N = 1042



■ Full Activation
■ Partial Activation

# Patients w/ISS ≤ 15 & No Trauma Team Activation

$$N = 48$$

Falls: 27 (56%)

Horse/falls: 7 (15%)

Primarily CHI: 38 (79%)

- Arrival to ED
  - PV = 23 (48%)
  - EMS = 17 (35%)
  - Transfers In = 4
  - $\blacksquare$  UNK = 3
  - $lue{}$  Oth = 1 (fell in ED)

GCS 15 
$$= 42\%$$

GCS 12-15 
$$= 19\%$$

$$GCS \le 11 = 4\%$$

GCS UNK = 
$$29\%$$

## Patients - Expired

```
N = 54
Causes:
  MVC = 21 (39\%)
  Falls = 10 (19\%)
  self-inflicted = 8 (15\%)
  MC = 4
  \overline{GSW} (unclear intent) = 3
  Pedestrian = 3
  Other = 5
       Horse = 2, Stab = 2, Struck by train = 1
```

## Patients - Expired

Injury Cause	Injuries Sustained	Protective Device
MVC = 21	Brain/Spinal = 6	Seatbelt = 6
	Brain/Other = 3	Seatbelt & Airbag = 1
	Spinal/Other = 1	None = 11
	Chest/Abd = 1	Unk = 3
Falls = 10	Brain = 8	na
	Spine = 1	
	Chest = 1	
Suicide/Self-Inflicted	Brain = 4	na
Injuries = 8	Anoxia = 4	

ISS  $\geq$ 25 = 29 patients (54%)

Average ISS = 22 (51 patients with known ISS)

## Patients Who Died w/ISS $\leq 9$ N = 10

#### 7/10 Died in ED

- 2 Anoxic/hanging (4, 4)
- 2 GSW (9, 1) & 1 Stab (9) w/"open wound" codes
- 1 fall (9) w/chest injuries closed/NOS
- 1 MVC (5) w/Rib Fx & contusions

#### 3/10 Died in ICU

- 1 MVC (9) Brain w/prolonged coma NOS (5days)
- 1 MVC (9) pelvis, age 91yr, +COPD, + Diab (1day)
- 1 Fall (4), Skull Fx, concussion, +DD, uneventful recovery until c/o back pain: non-traumatic T-spine lesion: family refused OR: Brady episode: ICU: family withdrew support & refused autopsy (15 days, 2ICU/vent)